
DECENTRALISATION AND DELIVERY OF SECONDARY SCHOOL EDUCATION: EXAMINING INSTITUTIONAL CAPACITY IN TANDAHIMBA AND MTWARA DISTRICTS, TANZANIA

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ABSTRACT

Purpose of the study:

The significance of institutional capacity has been advocated in as one of the way to improve provision of social services such as secondary school education to the society. The aim of this paper was to analyse the capacity of secondary school management in education service delivery in Tandahimba and Mtwara districts, Tanzania.

Short introduction of problem statement:

Regardless of implementation of decentralisation in Tandahimba and Mtwara districts, the districts had been ranking among the lowest in the national examinations results of form two and four for the last five years.

Method/methodology:

Research design applied in this study was cross-sectional explanatory research which employed a semi structured questionnaire to collect quantitative data from 229 secondary school teachers and district education officers. Also, an interview guide was used to collect qualitative data from District Executive Directors (DEDs), Region Administrative Secretary (RAS) and District

education officers (DEOs) as key informants, whereas a focus group discussion was used to collect data from teachers and parents. The quantitative data were analysed using measures of central tendency whilst the qualitative data was analysed using content analysis.

Results of the study:

The findings revealed that there is no shortage of skills, knowledge and teaching experiences but infrastructures and equipments. Therefore, this study concludes that the shortage of infrastructure and equipments might have been led to low level of academic performance as a result of provision of low quality education to secondary students.

Conclusion and policy recommendation:

Therefore, based on the findings the study concludes that, in case of soft resources (skills, knowledge and experiences) the schools have enough of them to deliver education effectively to secondary schools' students. However, regarding to the hard resources (infrastructures and equipments), the schools record an acute shortage. Based on the findings, policy implications had been suggested to encourage lower level take initiatives and innovative measures in making sure proper education is provided to youths for the benefit of the nation bearing in mind that they are the tomorrow nation. This is only possible if the central government and LGAs devolves or shift powers to these lower units of the government such as schools and communities. Those powers should be exercised in order to bring the expected impact of decentralisation.

Keywords: *Decentralisation, Institutional, Capacity, Resources, Infrastructure, Knowledge*

BACKGROUND OF PROBLEM STATEMENT

Decentralisation is a reform aimed to support Local Government Authorities (LGAs) improve social services delivery particularly health, water and sanitation, extension, infrastructure and education services (Aycrigg, 2013). In education, decentralisation comes from the recognition that less centralized decision-making would make schools more effective, and that it would make LGAs more competent in the delivery of education (Binswanger, 2011; Mdee & Thorley, 2016). Scholars have tested empirically the role of decentralisation in improving public service delivery in developed, emerging and developing economies (Sow & Razafimahefa, 2015). However, unlike developed countries, results in developing countries show that lack of capacity in low-income countries is considered one of the main constraints to achieving decentralisation for improved education service delivery (Daba, 2010; Cabral, 2011; Mushemeza, 2019). More specifically, Edwards and De Matthews (2014) posited that most developing countries lack the capacity to implement decentralisation.

Theory of Change and Principle-Agency Theory explain how activities such as improving the physical facilities in schools, provision of financial and material resources, managing the human resources and facilitating the school leadership when effectively implemented produce results that contribute to attainment of the improved education delivery, and hence most excellent academic performance (Meckling & Jensen, 1976; Weiss, 1995). Consequently, the principal-agency theory uncovers the relationship between Central government (CG) and LGAs in provision, mobilisation and use of both human and financial resources as well as teaching and

learning equipments and facilities. The theories are vital in examining how these interactions between the actors such as principals and agents are conducted. In similar vein, the theories explain how decentralization is coordinate and implemented at the local level.

Swanson and Holton (2001) posited that leadership is expertise that is combination of abilities, experiences, problem solving skills and knowledge. Leadership is the influence, power, and the legitimate authority, acquired by a leader to be able to effectively transform the organization through the management of the resources (Massawe, 2014). Effective leadership is argued to be a resource and way forward to improve performance in schools. Significance of effective school leadership is widely acknowledged in the twenty first century. Various studies have shown that most successful schools in developed and developing countries are the one that their heads of schools or school leaders demonstrate good leadership attributes (Yaakov & Tubin, 2014; Gurr, 2015). Administratively, the heads of schools are responsible for staffs, student's academic welfare, school supervision and inspection. So, school's leaders are key people in order the students to succeed academically (Idoli, Ekpang & Esuabana, 2011; Mawudeku & Ankumah, 2021). Under decentralization it was believed that LGAs and particularly schools would improve the adequacy of teachers and support for teachers to develop professionally through training and development programs (Mofuga, 2020). Teachers are among the fundamental resources in any school and effective teaching is one of the key propellers for school improvement.

According to Boex and Yilmaz (2010), decentralisation has to be considered ineffective unless school management translate their financial resources into more resourceful, responsive, and accountable education delivery services. Infrastructure and equipments are among the fundamental resources in any school and its influence on effective teaching is one of the key propellers for improvement of schools' infrastructure and equipments (Mdee & Thorley, 2016). Under decentralisation it was believed that LGAs and particularly schools would improve the adequacy of physical infrastructures and equipments by supporting the local communities in construction, improvement and maintenance of the old ones for better delivery of secondary education. Needless to say, their most important endeavour is building not only the classrooms and laboratories for comfortable learning but also procuring of tables, chairs and other equipment.

In Tanzania, several studies (Kopweh, 2013; Mdee & Thorley, 2016; Matete, 2016; Mushemeza, 2019) have analysed reasons of poor academic performance of secondary school students' years after implementation of decentralisation policy. However, capacity of secondary schools in Tandahimba and Mtwara districts is not known due to lack of empirical studies in the districts. Therefore, against this background it was imperative to conduct a study to analyse the schools' capacities so as to be able to explain the causative of low academic performance of secondary school students, and propose possible solutions.

PROBLEM STATEMENT

Moreover, regardless of implementation of decentralisation in Tandahimba and Mtwara districts, the districts had been ranking among the lowest in the national examinations results of form two and four for the last five years. In form four national examinations of 2016, Tandahimba district ranked 163rd among 178 districts. In 2017 and 2018 the district ranked 160th among 178 districts and 185th among 185 districts respectively. Also, in 2019 the district still occupied the lowest position of 169th among 195 districts in the country. Similarly, Mtwara district council in form four examinations of 2016, 2017 and 2018 ranked 146th, 116th and 161st respectively. In 2019 the

district occupied 154th position. Though there were some improvements from 2016 to 2017 and 2018 to 2019 but still the results were not inspiring. Also, in form two national exams Tandahimba and Mtwara districts ranked among the lowest by occupying 166th and 165th positions respectively in 2017. In 2018 and 2019 their positions were still very low as Tandahimba district ranked 182nd and 169th and Mtwara ranked 145th and 148th respectively. Besides, the nine schools located in Mtwara region which had low performance in the national form two results of 2016, five schools were from Tandahimba district and two schools were from Mtwara district (NECTA, 2016b).

Thus, there is a need to find out whether the decentralisation has been able to equip the schools with necessary resources in order to deliver quality education for all in Tandahimba and Mtwara districts. Thus, the study examined the capacity level of secondary schools in terms of human resources (teachers' understanding of subject matter, teaching skills and trainings attended), school leadership (leadership ability and experience of heads of schools), adequacy of school infrastructure such as classrooms, adequacy of schools' financial resources and teaching equipments.

RESEARCH OBJECTIVES

- i. To analyse the influence of school's human resources capacity on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania
- i. To evaluate the influence of school's leadership capacity on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania
- ii. To assess the influence of financial resources capacity of schools on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania
- iii. To examine the influence of school's infrastructure and equipments capacity on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania.

LITERTURE REVIEW

Theory of Change

Theory of change emerged in 1990s and was first used by the famous methodologist Caros Weiss in evaluating community programs. According to Weiss (1995) the Theory of Change uncovers the assumptions we make about what is possible in reaching a long-term goal. Therefore, since decentralisation is currently adopted by many countries as a policy and approach to empowers individual schools to adapt to changes and therefore enhance quality education delivery toward improved academic performance as its long-term goal. The Theory helps to explains how decentralisation is expected to lead to a specific development change that is delivery of high-quality education. Theory of Change helps to explain how activities such as upgrading the physical infrastructure at schools, giving of monetary and other non-pecuniary resources, supervision of the staffs and training and development are effectively implemented to produce a series of results that contribute to achieving the improved education delivery. Therefore, it is considered important to employ the Theory of Change to better understand the possible changes that have happened in education services delivery with a particular focus on delivery of education in the study area.

The Principal-Agency Theory

The principal-agency theory developed by William Meckling and Michael Jensen in 1976 is suitable and appropriate for this study. In an analysis made by Eisenhardt (1989) this theory is commonly used to describe the existing relationships between the principal and agent. Therefore, basing on the fact that the success of the relationship between the agent (CG) and principal (LGAs), depends on the level of decentralisation of power and decision making to lower levels. Thus, for schools to achieve their purpose makes this theory more useful as Mollel and Tollenaar (2013) highlighted that it is impossible to achieve fully decentralisation because at a certain level, the reallocation of public resources within the country requires coordination from a CG body to LGAs. One of the constraints towards efficiency and effectiveness of decentralisation is lack of transparency and accountability of central government to the LGAs, this situation is likely to affect the relationship between Central government and LGAs.

CONCEPTUAL FRAMEWORK

In a conceptual framework, it is depicted that the capacities of schools and their roles in a decentralised education delivery system are very important in the delivery of education and its resultant academic performance. School leadership, human resource, financial resources, infrastructures and equipment play an indispensable role in determining how best a school would deliver better education to, which in the end brings about changes in school and students' performance.

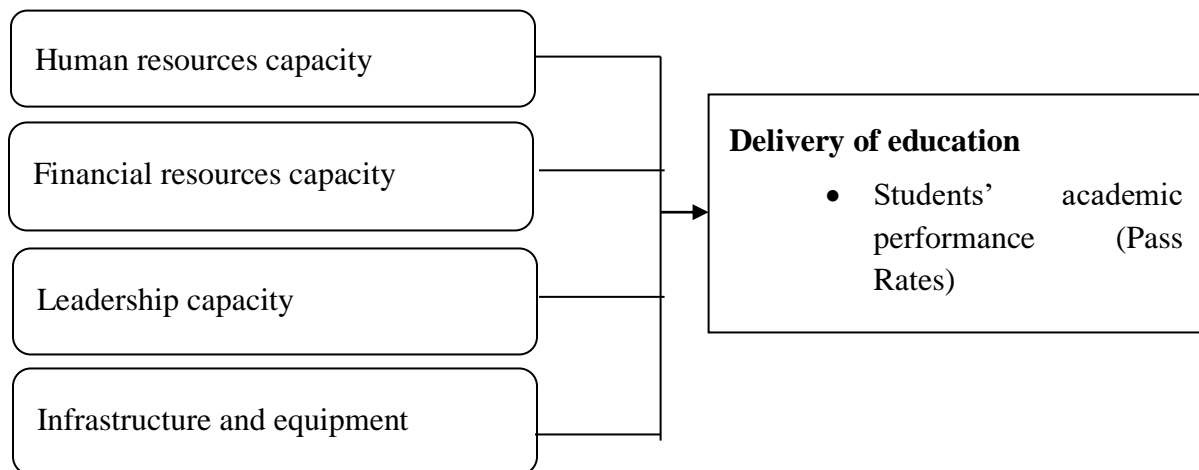


Figure 1: Conceptual Framework

Source: Reviewed Literature, 2020

RESEARCH METHODS

Research Philosophy and Design

Basing on the realm of the purpose of this study, pragmatism philosophy was used. Pragmatism was used because is a philosophy of the mixed methods approach (Pham, 2018). Thus in the lenses of decentralisation, schools capacities were assessed by applying scientific principles of quantitative and qualitative research. The design of this study was a cross-sectional explanatory design. It was cross sectional design because data were captured at one point in time due to time and resources constraint (Kothari, 2009). Moreover, explanatory design was chosen in order to explain the influence of decentralisation on delivery of education (Denscombe, 2010).

Target population and sampling Procedures

The population for this study included all secondary schools' teachers, Secondary schools students, District Education Officers (DEO), Education Coordinators (Ward Education Officers), District Education Inspectors (DEI) and Councillors in Mtwara and Tandahimba districts. In selecting a sample and the key informants as well as FGD participants, a researcher applied both probability and non-probability sampling techniques. Purposive sampling technique as a non-probability sampling method was applied to choose Mtwara region, Tandahimba district council, Mtwara district council and the key informants (2 DEDs, 2 DEOs, 2 DEIs, and REO). Moreover, councillors, ward education officers and students were purposively selected and included in the sample for interview. Likewise, the study conveniently selected 16 parents (8 in Tandahimba DC and 8 in Mtwara DC) and 10 teachers (5 in Tandahimba DC and 5 in Mtwara DC) who were willing to participate in focus group discussion. Head of schools, academic teachers and other teachers were selected using probability sampling technique, a systematic sampling technique.

Sample size

Determination of the sample size for quantitative or qualitative data depends on the size of the population and the accuracy of the estimates to be studied (Denscombe, 2010; Kothari, 2009). To ensure that the sample size was appropriate to represent the opinions of target population, sample size was 229 respondents. The sample size was calculated using Yamane formula. This formula was adopted because according to Tejada and Punzala (2012) it is simple and therefore provides accurate sample size, also fits with the available parameter N. The formula expressed as: $n = \frac{N}{1+N(e)^2}$. Where n = sample size, N = population size of all stakeholders with certain characteristics, e = precision factor coefficient (5%).

Data Collection

Primary quantitative data were collected using a questionnaire which was administered by the researcher and a research assistant. The questionnaire was used to gather data regarding to teachers' demographic characteristic such as age, gender, skills, education level, teaching experiences and issues on institution capacity such as quantity of tables, chairs, classrooms, lab apparatus and quantity of teachers. Likewise, primary qualitative data were solicited from key informants and focus group discussions using an interview guide and checklist respectively. With respect to every objective, information concerning availability and quantity of teachers, books, chairs, laboratory apparatus, and tables, chairs, teaching skills, experience and heads of school's ability to lead were gathered. In this study, quantitative and qualitative secondary data

were summarised from various documents (education policy, NECTA results, district education reports, regional education reports, scholarly books, journal articles) as well as documents from the various units of government and LGAs. The selected secondary data were used for all four objectives.

Data Analysis

Data collected through structured questionnaires, were summarized and coded and were analysed using measures of central tendency; mean, standard deviation and range. The qualitative data was analysed using thematic (content) analysis to examine interview and FGDs transcripts so as to discover patterns of frequent themes and sub-themes that addressed the research objectives of the study.

Reliability

In this study, the reliability of data was tested for internal consistency using the Cronbach’s alpha coefficients. As a rule of thumb, the values above 0.7 represent an acceptable level of internal reliability (Cohen, Manion & Marrison, 2007). The Cronbach’s alpha for variable institutional capacity with 14 items was found to be ‘0.776’ above the required standard value 0.7 (Table 1)

Table 1: Cronbach’s Alphas Values and Number of Items for each Construct

Indicators/items	Cronbach's Alpha	Number of items
Institutional capacity	.776	14

Source: Field Data, 2020

RESULTS AND DISCUSSIONS

Human Resources Capacity and Delivery of Secondary School Education

In this sub-chapter, the results of the first specific objective ‘to analyse the influence of human resources capacity of schools on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania’ are presented and discussed. The parameters for this objective were; number of school teachers, subject knowledge of teachers, teaching skills possessed by teachers, teachers’ teaching experience and teachers training and development programs which are crucial features of human resources particularly teaching staff are interpreted and discussed. Results in Table 2 indicates that secondary school teachers and district education officers agreed that secondary schools in Tandahimba DC and Mtwara DC had capable human resources especially teachers to teach students effectively, and thus improved education delivery. The items which represent human resource capacity include; teaching knowledge, teaching skills, teaching experience and teachers’ adequate training, all scored mean >3, which fall under the scale category of agree. Also, the parameters had little dispersion and variability around the mean of the data set, on average, with a range of four spreading from one to five. So the values in statistical data set are close to the mean of a sample population.

Table 2: Mean and Standard Deviation of School Capacity Parameters (N=229)

No.	Parameter	Range	Minimum	Maximum	Mean	Std. Deviation
1	School teachers	4.00	1.00	5.00	2.3057	1.02727
2	Subject knowledge	4.00	1.00	5.00	3.3537	1.00077
3	Teaching skills	4.00	1.00	5.00	3.9782	.95718
4	Teaching experience	4.00	1.00	5.00	4.1441	.75581
5	Leadership ability of head of school	4.00	1.00	5.00	4.0262	.85287
6	Teachers have adequate training	4.00	1.00	5.00	3.1397	1.18752
7	Financial resources	3.00	1.00	4.00	2.4017	1.12203
8	Leadership experience of head of school	4.00	1.00	5.00	3.8210	.97256
9	Books	4.00	1.00	5.00	2.5677	1.31490
10	Audio visuals	3.00	1.00	4.00	1.3974	.73996
11	Tables	4.00	1.00	5.00	2.5808	1.36008
12	Chairs	4.00	1.00	5.00	2.3668	1.16827
13	Laboratory apparatuses	4.00	1.00	5.00	2.8559	1.45434
14	Classrooms	4.00	1.00	5.00	3.4498	1.18963

Source: Field Data 2020

On the contrary, the results in Table 2 indicate that, the item which asks whether the schools had enough number of teachers averaged 2.31 (SD=1.03; range 1-5) implying that the schools capacity in terms of number of teachers was not satisfactory since surveyed secondary school teachers and district education officers neither agreed nor disagreed whether schools possess enough teachers or not. This parameter has moderate dispersion and variability around the mean of the data set, on average. So the values in statistical data set are not so close to the mean of a sample population at a range of one to four. Therefore, the findings of the study imply that secondary school teachers in Mtwara and Tandahimba councils are not enough and some need to be trained in subject contents to improve their effectiveness and efficiency in education delivery. In the light of these findings, the standing point of the study is that a greater deal of teachers but not majority, don't have adequate training.

In view of that, the information which was presented in the focus group discussion with teachers at Nanguruwe and Mchichira in Mtwara DC and Tandahimba DC enlighten the study that some teachers fall short in subject knowledge as well as pedagogical skills due to low experience and poor training especially at college or university level and lack of commitment to the work as they regard the job as just a stepping stone. During semi-structured interview with DEO of Tandahimba district council, the study findings were confirmed that subject knowledge and teaching skills is a big problem to less experienced teachers especially those who went straight to university form six than those who went to university through diploma colleges. Similarly, the interview corroborated that in order to improve their efficiency in teaching they have be trained as Jutting et al. (2005) suggested that fruitful decentralisation is unavoidably preceded by strong investments in building capacity of local governments and schools in terms of human resources.

In addition, Cooksey and Kikula (2005) stated that human resource constraints refer mainly to staffing shortages and the lack of adequate training among existing staff and it rank first among constraints facing LGAs in Tanzania.

According to Tidemand (2018), in the initial few years of LGRP I, the government of Tanzania attempted to establish local recruitment boards to LGAs to recruit civil servants in LGAs but the policy was soon reversed with the passing of the Public Service Act (2002) and its subsequent amendments. During that time the LGAs were able to recruit teachers according to their needs. Despite the fact that the shortage of teachers remained but the gap was narrowed. However, as a result Public Service Act of 2002, the human resource is currently supervised by central government through the Public Service Recruitment Secretariat (PSRS). The centralised systems of recruitment have resulted in a mismatch between the local working environment and the preferences and qualifications of employed staffs such as teachers who do not report where they had been posted (Kinemo et al., 2015). This has jeopardized the capacities of LGAs in terms of human resources especially qualified teachers in secondary schools. The shortage of qualified teachers has continued to undermine the efforts of decentralisation to improve the access and delivery of quality education to all.

Capacity of Heads of Schools and Delivery of Secondary Education

In this sub-section, the results of the second specific objective ‘to evaluate the influence of school’s leadership capacity on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania’ were presented and discussed. The parameters for this objective were; leadership ability of head of school and leadership experience of head of school to improve education delivery and its resultant academic performance of students. Regarding these parameters the study analysed whether heads of schools have the capacity (ability and experience) to administer schools to be able to deliver quality education under this decentralised system. Table 3 shows that, the results of measures of central tendency and dispersion for the parameter which asks about the capacity of head of school in terms of leadership abilities on average had a mean of 4.03 (SD=0.85287; range 1-5) implying that head of schools have greater capacity to implement the task of leading other teachers and students to ensure proper delivery of education by enforcing teaching timetable at school and other academic activities. The secondary school teachers and district education officers strongly agreed that heads of schools had leadership abilities to effectively lead their schools.

Likewise, the parameter that asks if the head of school has good leadership experience to manage the school scored the average that was within scale category of agree of 3.821 (SD=0.9723; range 1-5) signifying that head of school possessed good leadership experience (Table 2). This imply that the surveyed teachers and district education officers on average agreed that heads of schools have long experience in leading the teaching, no-teaching staffs and students to the success of the schools such as improve education delivery and ultimately academic performance rises. In addition, the parameter has also little dispersion and variability around the mean of the data set, on average. So the values in statistical data set are close to the mean of a sample population at a range from one to five. The findings of this study suggest that the heads of schools in Mtwara and Tandahimba DCs possess sufficient leadership ability and experience. The implication of sufficient leadership ability and experience of heads of schools entails capacity of school leaders to plan, manage both human and physical resources, good policy

implementation, academic supervision and fostering relationships with other schools and the community around

Similarly, the findings were supported by information solicited during the focus group discussion with teachers at Nanguruwe and Mchichira in Mtwara and Tandahimba DCs pointed out that the heads of schools had the ability and skills in leading schools to fulfil their goals. Under decentralised education system, school level decentralisation is regularly go together with policies requiring head of school, teachers, parents, and community to mutually organise school development plans and implementation strategies, whereby funding disbursed by the central government. In addition, the heads of schools are delegated decision-making authority over school operations. School autonomy means transferring of legal and administrative responsibilities to heads of schools and or appointed school governing bodies aimed at bringing the decision making power to school in order to improve the delivery of education. So, heads of schools as the leaders and managers of the schools needs experience and knowledge to differentiate their schools from others.

The findings were corroborated and validated by key informants during a semi-structured interview. They reported that heads of schools are trustworthy, honest, hard workers, humble, not vindictive, team players, problem solvers, have ability to guide others, react appropriately to changes, possess ability to facilitates and accommodate changes and committed to their tasks. As leaders, they understand the gravity of their responsibilities to the school, community and nation in general. They added that decentralization had given them obligations but also opportunities to use their leadership skills for the betterment of the schools. The transfer of decision-making authority to heads of schools can theoretically be seen as a formal modification of governance structures, as a form of decentralisation that identifies individual school as the crucial unit of reforms. Also, transfer of decision-making authority to heads of schools is considered as the most important course of action which could stimulate and sustain school improvements. Though, school autonomy gives heads of schools the tools and the accountability to effectively lead the school, still, for decentralisation to schools to be successful, head of school must possess innovative skills in leadership and management. And, as results indicated, the leadership skills of heads off schools are needed now, under decentralisation, than ever.

The results of this study imply that heads of schools have the ability to supervise and control schools' activities like they do about these teaching and learning activities. Also, these findings suggest that heads of schools possess human resource management capacity since were able to supervise the teachers to teach and conduct tests. Accordingly, the study is of the view that such level of leadership ability and experience can improve school management and hence bring about positive impact of decentralisation. In addition, the focus group discussion with students at Lukokoda in Tandahimba DC substantiated the empirical findings. The central government of Tanzania through the Ministry of education and vocational training has continued to be largely the supervisors and advisers concerning educational decisions and activities at local levels. At a school level, heads of schools are provided with the overall duty of ensuring successful implementation of curriculum and school programmes, supervising and monitoring day to day activities of teaching and learning, motivating teachers, and ensuring their commitment and school performance amongst other responsibilities. This state of affairs leads to the demand of tough heads of schools in quite a lot of aspects like authority and autonomy, training, motivations and other support from the central and local governments.

Needless to say, head of school can encourage school-based reform when display good leadership capabilities and receive sufficient training to lead and manage the school community and, especially, the teaching staffs. The increased power given to heads of schools under decentralisation provides them with the responsibility, to develop a vision and mission for the school that is shared by the community. The mutual planning and development of school strategies creates a common obligation plus incentives to work collectively to execute them in order to improve delivery of high quality education. Since, this provides incentives for teachers to improve their classroom performance. That is why, leadership ability and experience of heads of schools in Mtwara and Tandahimba districts were analysed to ascertain its level and impact on delivery of education and academic performance of secondary schools students.

Hypothetically, the leadership abilities and experience of head of school are the major determinants towards the secondary school performance (Evans, Bosire & Ajowi, 2016). In Tanzanian secondary schools, the head of schools is in charge of the human resource management and all other managerial activities. Consequently, when the head of schools through decentralisation are given the authority to generate and disburse funds, manage human resources, and develop school infrastructures, greater gains can be realized in terms of quality education delivery and ultimately improved academic performance of students. According to Gurr (2015), when individual schools are given the opportunity to make decisions, a higher degree of morale and commitment to the organizational goals and objectives are fostered. The teachers will put forth more efforts since it will be a means by which their strategic plans can be implemented. Under school autonomy, heads of schools usually acquire bigger management powers to monitor, evaluate, and control school resources. In their study, Evans et al., (2016) commented that a good school leader is the one with outstanding leadership skills and can move the school forward though among others improving students' academic performance.

Financial Capacity and Delivery of Secondary Education

In this section, the results of the third specific objective 'to assess the influence of financial resources capacity of schools on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania' were presented and discussed. The objective of decentralisation was to transfer power to schools and LGAs to mobilise and use financial resources in order to ensure funds were put into proper use. Results in Table 2 regarding financial capabilities were investigated under the item which asks whether the schools were financially sound. The financial capacity parameter averaged 2.40 (SD=1.122; range 1-4) signifying that the item possess consistency data and that the schools capacity financially was not established since surveyed secondary school teachers and district education officers neither agreed nor disagreed regarding to schools and LGAs financial capacities. This parameter has also moderate dispersion and variability around the mean of the data set, on average. So the values in statistical data set are not so close to the mean of a sample population at a range of one to four.

Lack of resources to implement the reforms was featured too in the district officials' opinions. The above findings were corroborated by Tandahimba and Mtwara DEO when confirmed that heads of schools usually receive 12,500 TZS per year as capitation money for each student and 20,000 TZS as school fee compensation for every student per year. Also, the DEOs articulated that the capitation money is used to buy laboratory apparatuses only while the school fees compensation fund is for day-to-day activities of the schools or administration expenses. District education officer further added that, the school fees compensation fund is not adequate to pay for

day-to-day activities of the school, as a result heads of schools tend to borrow the capitation money and put into schools' daily activities and then later on repay back the capitation money. However, this is not a standard procedure and not acceptable as per government financial regulations.

Similar results were described in the study of Carlitz and McGee (2013) that, the capitation grant was initially set at TZS 25,000 per student under SEDP I (approximately US\$16 at 2004 exchange rates) and currently under SEDP II it is 12,500 TZS (approximately 5 US\$ at current exchange rate). Moreover, the DEO of Tandahimba DC informed the study that the LGA also has inadequate fund to finance its responsibilities of providing good services to the community. Iterated that the LGAs (municipals and city councils) has a lot of responsibilities including provision of clean water, health services, infrastructure development and education to mention a few, while their financial sources has been taken away by the central government. The officer lamented that the introduction of entrepreneurs' identity card fee and exemption of crop tax for a cargo of less than five tones have destroyed LGAs revenues. Also, the study found that the funds for other charges (OC) at the district level are very limited.

Furthermore, teachers in focus group in Nanguruwe and Mchichira in Mtwara and Tandahimba districts informed the study that many activities and projects do not get completed because of the shortage or inadequacy of financial resources. The study was informed that capitation grants had been specified to be used for teaching and learning equipments only. They further said that if the capitation fund is used in other activities rather than intended ones the head of school will be considered to have been misappropriated the money. The same goes for school fee compensation fund which is provided to schools by the central government to compensate the schools for loss of fund which schools used to collect as school fees from students after the government announced to provide free education and abolished school fees and other contributions. Similarly, another teacher informed the study that community contributions had fallen to extent that schools cannot fund the activities used to be funded using community contributions such as infrastructure construction and maintenance, academic strategies like remedial classes and study camps for from two, form four and form six, and hiring of part time teachers especially for science subjects and security guard.

In line with the study findings, Mdee and Thorley (2016) confirmed the findings of this study which says local government and schools in Tanzania has very inadequate resource and is extremely dependent on central government funding. Likewise, Cooksey and Kikula, (2005) in their study to analyse the limits of local participation in local government planning in Tanzania indicated lack of resources such as financial resources constraining effective implementations of decisions made at the district level. In addition, Boex and Yilmaz (2010) validated the findings of the study that service provision including education delivery in the developing economies is challenged by the inadequate financial capacity at the local government level. The LGAs are provided with only some degree of power to mobilise their own financial resources, implement their own financial plans and strategies, and raise revenue, borrowing, and spending. According to Hoffman (2006), the LGAs power to collect revenue is restricted to around 2–6%. Much power rests on the central government with the frequently imposed changes in revenue management, which create a difficult situation to develop sustainable monetary capacity at the LGAs. Therefore LGAs are highly dependent on central government for financial resources.

These findings support the view that LGAs' or schools level of planning and implementation of education policies and other sustainable development initiatives is a relatively weak due to among others, the weaker resource base mechanism. The assumption is that fiscal decentralisation, by increasing the discretionary resources available to LGAs or schools would give the planners more opportunities to exercise their skills. If LGAs or schools are unable to fund investments identified in the course of the participatory method is a very big discouragement to planning and implementation. The LGAs or schools' plans have to be based on local level resources if the plans are to be effective in execution. However, the LGAs or schools finances that might facilitate implement local plans are scarce. Thus implementation of the LGAs or schools plans is conducted parallel to centrally financed programmes. In some incidences there is a mismatch of the local and central programmes. Due to lack of funds the central government is overwhelmed and cannot meet all the demands of its schools. However, the limits to decentralization in developing countries often go much further than can be justified by the limited capacity of local governments. Lack of local government capacity should not be used as an excuse to delay decentralisation but should be seen as a challenge to be managed during the decentralisation process.

Capacity of Infrastructure and Equipments and Delivery of Secondary Education

In this sub-chapter, the results of the fourth specific objective 'to examine the influence of school's infrastructure and equipments capacity on delivery of secondary school education in Tandahimba and Mtwara districts, Tanzania' were presented and discussed. The parameters of this objective were; availability of books, audio-visuals, tables, chairs, laboratory apparatuses and classrooms which are crucial features of schools' physical resources are analysed, interpreted and discussed. These resources are important due to its ability to ensure the schools to deliver quality education under the existing decentralised education system. The results of central tendency and dispersion of data in Table 2 concerning capacity of infrastructure and equipment indicate that, the capacity of schools in terms of books scored 2.57 on average (SD=1.32; range 1-5) which imply that secondary schools teachers and district education officers neither agreed nor disagreed that schools and LGAs had books capacity for effective teaching and learning process. Data of this parameter has relatively high dispersion and variability around the mean of the data set, on average, due to variation in the group that was studied (Al-Saleh & Yousif, 2009; Rumsey, 2016). So the values in statistical data set are relatively far to the mean of a sample population at a range of one to five.

Furthermore, regarding to availability and adequacy of audio-visual equipments, the results of the mean and standard deviation for audio visuals (M=1.4, SD=0.7399; range 1-4) in Table 2 imply that little dispersion and variability around the mean of the data set, on average. So the values in statistical data set were close to the mean of a sample population. This finding shows that the surveyed secondary school teachers and district education officers disagreed that the schools had capacity of audio visuals in the schools for improving education delivery. In addition, Table 2 show that parameters 'tables' scored (M= 2.58, SD=1.3601; range 1-5), implying schools' capacity in terms of tables is not clearly established. Besides, Table 2 shows that parameters 'laboratory apparatuses' scored (M=2.86, SD=1.4543; range 1-5), implying schools' capacity in terms of laboratory apparatuses is not clearly established. This result implies that the surveyed secondary school teachers and district education officers neither agreed nor

disagreed that the schools had capacity of having laboratory apparatuses for all students. The finding shows that dispersion and variability of data was high.

On the contrary, the findings regarding classrooms in Table 2 shows that respondents agreed that schools had enough classrooms. The parameter showed moderate variability around the mean of data set. So the values in statistical data set are close enough to the mean of a sample population at a range of one to five ($M=3.45$, $SD=1.1896$; range 1-5). The results imply that different groups surveyed had more or less the same opinions regarding schools' capacity in terms of classrooms

In similar view, the in-depth interview with key informants revealed that the books are less sufficient in secondary schools in Mtwara and Tandahimba councils. The findings were validated during focus group discussion with teachers at Mchichira and Nanguruwe that decentralization has not brought expected results proclaimed such as increase adequacy of both text and extra books in secondary schools as proclaimed in ERP, SEDP I and SEDP II as well as ETP. The study found that the shortage is associated with subjects and not the general number of books because some subjects have excess of books while other subjects have fewer books or do not have at all. The study was informed that schools have a lot of science books while lacking books for arts subjects. However, most of books are extra books and not text books. Thus, this study establishes that secondary schools in Tandahimba DC and Mtwara DC have inadequate text books. The findings corroborated with Kopweh (2013), Carlitz (2016) and Matete (2016) that in Tanzania there had been shortage of books in secondary schools regardless of and there have never been a time when the books were enough.

During focus group discussion with teachers the findings were corroborated that schools have inadequate or no audio-visual equipments and laboratory equipments; and shortage of tables and chairs. Although this study revealed that many schools in these districts do not have electricity, but the shortage of audio-visual equipments is not associated with the absence of electric power in most schools rather readiness to use audio-visual for teaching purposes. Most teachers are not real ready to use audio-visual for teaching purposes. The DEOs of Tandahimba and Mtwara DCs commented on the low use of audio visual equipments for teaching in their districts. In case of tables and chairs, the study was informed that schools face a challenge of inadequate tables and chairs with the problem of tables being severe that that of chairs. However, most of chairs in the classrooms were seen to be too old and too weak. In similar view, in the in-depth interview with key informants the study revealed that the two LGAs face a challenge of having in-sufficient tables and chairs. The study found that in order to curb the problem the LGAs through head of schools had started issuing instruction to parents of newly selected Form One students to report with either a chair or table or both depending on the needs. Similar results were found by Matete (2016) study conducted in Tanzania and Daba (2010) in Ethiopia who found that many schools in have no enough chairs and tables.

Although quantitative results revealed that there are enough classroom in the study areas, the information which was presented in the focus group discussion with teachers at Nanguruwe and Mchichira and the semi-structured interview with DEOs in Mtwara DC and Tandahimba DC enlighten that many schools fall short of number of classrooms. Thus, this study has a view that shortage of classrooms and laboratory apparatuses might be serious challenges to the delivery of quality education. These findings were corroborated by Kisumbe, Sanga & Kasubi, (2014) in their study which assessed the implications of decentralisation on pro-poor service delivery.

Kisumbe and others revealed that classrooms in secondary schools are not adequate in both quantity and quality. Similar results were found by Matete (2016).

CONCLUSION

The results of this study show that, schools experience a shortage of number of teachers, financial resources, tables, chairs and laboratory apparatuses whilst there is a substantial amount of subject knowledge possessed by teachers, also teaching skill of teachers were found to be enough. The findings also show that teachers have some training. The findings imply that schools under decentralisation still had shortage of tangible resources such as infrastructure and fund while abundant of soft resources such as skills and knowledge. On the contrary, the result show that teachers possess high level of teaching experience and skills as well as heads' of schools leadership abilities and experience were also found to be of high level. Therefore, based on the findings the study concludes that, in case of soft resources (skills, knowledge and experiences) the schools have enough of them to deliver education effectively to secondary schools' students. However, regarding to the hard resources (infrastructures and equipments), the schools record an acute shortage.

Study Implications

The study makes a number of contributions with respect to matters of policy, theoretical and practical concern. The contribution with regard to the policy will be presented first, followed by theory contribution and lastly the practical implications.

Policy implications

With regards to the observation of the researcher, responses of surveyed teachers and district education officers in respect to influences of decentralisation on education delivery and its resultant academic performance of students and empirical results revealed in this study, policy implications had been suggested to encourage lower level take initiatives and innovative measures in making sure proper education is provided to youths for the benefit of the nation bearing in mind that they are the tomorrow nation. This is only possible if the central government and LGAs devolves or shift powers to these lower units of the government such as schools and communities. Those powers should be exercised in order to bring the expected impact of decentralisation. Otherwise if lower units' powers and authority remains in policy documents and not put into action the nation will continue looking for scapegoat to blame for poor academic results.

Practical implications

The findings of this thesis present a number of practical implications. First, these findings may also help governments, and educators, establish strategies which would enhance the availability of teachers and infrastructure at secondary schools. Through this study the central government will learn to shift more power to lower level units which are in the front line fighting a war (provision of quality education) with 'poor weapons' (lack of fund, human resources, infrastructures, and equipments). They need to be equipped with current and enough weapons (skills, equipments, resources, power) to win the war (improve education delivery).

RECOMMENDATIONS

Based on the findings, this research recommends to the central government to invest heavily in infrastructures, such as building classrooms, dormitories, learning and teaching materials and recruitment of qualified teachers as well as improve school leadership. Also, build capacity of teachers and school boards through training and seminars.

REFERENCES

- Al-Saleh, M.F. & Yousif, A.E. (2009). Properties of the Standard Deviation that are Rarely Mentioned in Classrooms. *Austrian Journal of Statistics*, 38(3); 193–202.
- Aycrigg, M. (2013). *Participation and the World Bank: Success, Constraints, and Responses*. Social Development Paper No. 29. Washington, DC: World Bank
- Binswanger, H. (2011). *Technical Consultation on the Decentralization of Rural Development*. Proceedings of FAO conference, Rome, 16-18 December 1997. Rome: FAO
- Boex, J. & Yilmaz, S. (2010). An Analytical Framework for Assessing Decentralized Local Governance and the Local Public Sector. *IDG Working Paper* No. 2010-06. Urban Institute Center on International Development and Governance.
- Cabral, L. (2011). Decentralisation in Africa: Scope, Motivations and Impact on Service Delivery and Poverty. *Working papare 020*. Overseas Development Institute and Future Agricultures
- Carlitz, R. & McGee, R. (2013). Raising the stakes: The impact of Hakielimu's advocacy work on education policy and budget in Tanzania. Study No. 12, June 2013
- Carlitz, R. (2016). *Promoting Active Engagement of School Management Committees in Tanzania: A Research Proposal*. University of California, Los Angeles, USA.
- Cohen, L., Manion, L., & Marrison, K. (2007). *Research methods in education (6th edition)*. London: Routledge Taylor & Francis group.
- Cooksey, B. & Kikula, I. (2005). When bottom-up meets top-down: the limits of local participation in local government planning in Tanzania. *Special Paper No: 17, Research on Poverty Alleviation*. Mkuki na Nyota Publishers
- Daba, O.T. (2010). *Decentralization and Community Participation in Education in Ethiopia: A case of three woredas in Horro Gudduru Wollaga Zone of Oromia National Regional State*. Institute for Educational Research, Faculty of Education, UNIVERSITETET I OSLO
- Denscombe, M. (2010). *The Good Research Guide: For small-scale social research projects, Fourth Edition*. London: McGraw-Hill.
- Edwards Jr. D. B., & DeMatthews, D. (2014). Historical trends in educational decentralization in the United States and developing countries: A periodization and comparison in the post-WWII context. *Education Policy Analysis Archives*, 22(40): 1-39

- Eisenhardt, K. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, 14(4), 532-550. Retrieved November 29, 2020, from <http://www.jstor.org/stable/258557>
- Evans, N.N., Bosire, J. & Ajowi, J. (2016). Analysis of the Challenges Faced by Principals in the Management of Support Staff in Public Secondary Schools in Nyamira County, Kenya. *Journal of Research in Humanities and Social Science*, 4: 41-50
- Gurr, D. (2015). A Model of Successful School Leadership from the International Successful School Principal-ship Project. *Societies*, 5 (2015) 136–150
- Hoffman, B.D. (2006). *Political accountability at the local level in Tanzania*, <http://escholarship.org/uc/item/1zg1g7nj>
- Idoli, N.B., Ekpang, P.U. & Esuabana, S.B. (2011). Impact of school administration on students learning. *Nigerian Journal of Social and Development Issues*, 8(1), 80-92
- Jütting, J., Corsi, E., Kauffmann, C., McDonnell, I., Osterrieder, H., Pinaud, N. & Wegner, L. (2005). What makes decentralization in developing countries pro-poor??. *The European Journal of Development Research*, 17 (4), pp. 626-648.
- Kinemo, S., Ndikumana, E., Kiyabo, H., Shilingi, V., Kwayu, M. & Andrea, P. (2015). Decentralization of Human Resource Management in Tanzanian Governmental Organization. In Ko de Ridder, Emans, B., Hulst & Tollenaar eds. *Public Administration in Tanzania, Current issues and challenges*. African studies centre, African Public Administration and Management series, Vol.3
- Kisumbe, L; Sanga, D. & Kasubi, J. W. (2014). More than a Decade of Decentralisation in Tanzania: Its Implications on Pro-poor Service Delivery. The Case of Primary Education and Health Services. *International Journal of Scientific and Research Publications*, 4(2), ISSN 2250-3153
- Kopweh, P. S. (2014). *Curriculum development in Tanzania: an investigation of the formulation, management and implementation of the 2005 curriculum reform in selected disadvantaged districts* (Doctoral thesis, University of Glasgow). Glasgow Theses Service. <http://theses.gla.ac.uk/5774/>
- Kothari, S. K. (2009). *Research Methodology*. New Delhi: New Age International (P) Ltd.
- Massawe, D. (2014). *Assessment of Leadership Practices at School Level in Community Secondary Schools: A Case of Selected Schools in Kinondoni Municipality, Tanzania*. A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Education in Administration, Planning and Policy Studies of the Open University of Tanzania
- Matete, R. (2016). Challenges Facing Primary Education under Decentralisation of Primary School Management in Tanzania. *International Journal of Humanities and Social Science*, 6(1); 175-184
- Mawudeku, I. & Amkumah, F.J. (2021). The Role of Administrators in Enhancing Students' Academic Performance in Higher Education Institutions. *IOSR Journal of Humanities and Social Science (IOSR-JHSS)* Volume 26, Issue 9, Series 3, pages 16-22

- Mdee, A. & Thorley, L. (2016). *Good governance, local government, accountability and service delivery in Tanzania. Exploring the context for creating a local governance performance index*. Working Paper 2.
- Meckling, W.H. & Jensen, M.C. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics*, 3 (1976) 305-360
- Mofuga, C.S. (2020). Influence of leadership attributes of head of schools on the student's academic performance in selected secondary schools in Tanzania: A case of Mbulu district (PhD Thesis, Open University of Tanzania). GRIN Verlag. <https://www.dymocks.com.au/book/>
- Mollel, H. A., & Tollenaar, A. (2013). Decentralization in Tanzania: Design and Application in Planning Decisions. *International Journal of Public Administration*, 36(5), 344-353.
- Mushemeza, E., D. (2019). Decentralisation in Uganda: Trends, Achievements, Challenges and Proposals for Consolidation, Kampala: *ACODE Policy Research Paper Series No.93*. ACODE.
- NECTA (2016a). Matokeo ya Mtihani wa Kidato cha Nne (*Form Four National Examination results*). Dar es Salaam, Tanzania.
- NECTA (2016b). Matokeo ya Mtihani wa Kidato cha Pili (*Form Two National Examination results*). Dar es Salaam, Tanzania.
- Pham, L.T.M. (2018). *Qualitative Approach to Research: A Review of Advantages and Disadvantages of Three Paradigms*. Masters Thesis. The University of Adelaide.
- Rumsey, D. J. (2016). *Statistics for Dummies* (2nd Edition). Wiley Publications. 416 pages. ISBN: 978-1-119-29352-1.
- Sow, M. & Razafimahefa, I.F. (2015). Fiscal Decentralization and the Efficiency of Public Service Delivery. IMF Working Paper WP/15/59. Fiscal Affairs Department, IMF.
- Swanson, R. A. & Holton, E. F (2001). *Foundations of Human Resource Development*. San Francisco: Berrett-Koehler.
- Tejada, J. J. & Punzalan, J. R. B. (2012). On the Misuse of Slovin's Formula. *The Philippine Statistician*, 61(1), 129-136.
- Tidemand, P. (2018). *Situational analysis: UNICEF Tanzania Decentralization and Local Governance Support Strategy (Mainland and Zanzibar)*. UNICEF. <https://www.unicef.org/tanzania/media/1491/file/DeLOG-Assessment-Stocktake.pdf>
- United Republic of Tanzania. (2005a). *Final Report of a Strategic Framework for the Financing of Local Governments in Tanzania*. Author.
- URT (2010). *Education sector development programme (ESDP): Education sector performance report 2009/2010*. Ministry of Education and Vocational Training.
- Weiss, C. H. (1995). Nothing as Practical as Good Theory: Exploring Theory-based Evaluation for Comprehensive Community Initiatives for Children and Families. In *New Approaches to Evaluating Community Initiatives: Concepts, Methods, and Contexts*, ed. James Connell et al. Washington, DC: Aspen Institute.

Yaakov, O.B. & Tubin, D. I. (2014). The evolution of success. In *Leading Schools Successfully: Stories from the Field*; Day, C., Gurr, D., Eds Routledge: London, UK, 2014; pp. 19–30.

Yamane, T. (1967). *Statistics, An introductory Analysis 2nd Ed.* New York: Harper